

Amendments to the Claims

1-8. (Canceled)

9. (Currently Amended) A method for verifying an availability of a server ~~to reduce a load placed on the server,~~ comprising:

transmitting an availability ~~request~~ requests by a first client to the server;

~~transmitting the first client receiving a response to the availability request; request by the server to the client by confirmation message if the server is available;~~

the first client transmitting a message regarding an availability of the server ~~by the client~~ to a plurality of predefinable other clients; and

~~reducing the load placed on the server by~~ preventing transmission of ~~the any~~ availability requests by the plurality of predefinable other clients to the server for at least a predefinable prescribable period of time, time t_r ,

wherein the predefinable period of time t_r is calculated by:

$$t_r(a, n, s, v) = \frac{60}{a \cdot (v \cdot n + s(1 - v))}$$

wherein:

—— a is request rate per minute sending by the client to the server for the availability requests;

—— n is a number of clients within the server,

—— s is a number of subnetworks within the server, and

—— v is loss rate.

10. (Currently Amended) The method as claimed in claim 9, wherein the method is used for verifying ~~the~~ availability of the server in a packet-oriented communication network.

11. (Currently Amended) The method as claimed in claim 9, wherein data is transmitted between the server and the first client and the predefinable other clients by a connectionless switching control.

12. (Currently Amended) The method as claimed in claim 9, wherein the message regarding the availability of the server is transmitted by the first client to the plurality of predefinable other clients using a multicast message.

13. (Currently Amended) The method as claimed in claim 9, wherein the first client sends a message regarding an availability of the server to inform only the plurality of predefinable other clients within a same subnetwork. ~~subnetwork about the availability of the server.~~

14. (Currently Amended) The method as claimed in claim 9, wherein the first client executes the availability request ~~requests~~ at a time which is predefined by a first timer.

15. (Currently Amended) The method as claimed in claim 14, wherein the first timer is reset to a predefinable value after ~~when~~ the response to the availability request is received by the first client. ~~message regarding the availability of the server is received.~~

16. (Currently Amended) A control program loaded into a random access memory of a client and having a code section, comprising:

a first code portion configured to cause the client to transmit ~~that transmits~~ an availability request ~~requests by the client~~ to a server;

a second code portion configured to cause the client to monitor for ~~that monitors~~ a receipt of a confirmation message responding to the availability request ~~requests~~ if the server is available; and

a third code portion configured to cause the client to transmit ~~that transmits~~ a message regarding an availability of the server to a plurality of predefinable other clients, the message regarding the availability of the server configured to prevent a transmission of availability requests by the predefinable other clients to the server for a predefinable period of time, clients; ~~clients;~~ and

a code that monitors a receipt of a message of the plurality of predefinable other clients regarding the availability of the server,

wherein a transmission of the availability request by the plurality of predefinable other clients to the server is prevented for a predefinable period of time t_r when the message is received to reduce a load placed on the server,

wherein the predefinable period of time t_r is calculated by:

$$t_r(a, n, s, v) = \frac{60}{a^{v^2}(v^2n + s(1-v))}$$

wherein:

_____ a is request rate per minute sending by the client to the server for the availability requests;

_____ n is a number of clients within the server;

_____ s is a number of subnetworks within the server; and

_____ v is loss rate.

17. (Canceled)

18. (Currently Amended) A client ~~of~~ for a communication network ~~providing a connectionless service~~, comprising:

a first device configured to transmit ~~for transmitting~~ an availability request ~~requests~~ to a server;

a second device configured to monitor ~~for monitoring for~~ a receipt of a response comprising a confirmation message responding to the availability request if the server is available;

a third device configured to transmit ~~for transmitting~~ a message regarding an availability of the server to a plurality of predefinable other clients, the message regarding the availability of the server configured to prevent a transmission of an availability request by any of the predefinable other clients to the server for a predefinable period of time if the confirmation message responding to the availability request is detected by the second device. ~~clients; and~~

~~a device for monitoring a receipt of a message of the plurality of predefinable other clients regarding the availability of the server and for preventing a transmission of the~~

availability request by the plurality of predefinable other clients to the server for a predefinable period of time t_r when the message is received to reduce a load placed on the server;

wherein the predefinable period of time t_r is calculated by:

$$t_r(a, n, s, v) = \frac{60}{a^{-(v \cdot n + s(1-v))}}$$

wherein:

_____ a is request rate per minute sending by the client to the server for the availability requests;

_____ n is a number of clients within the server;

_____ s is a number of subnetworks within the server; and

_____ v is loss rate.

19. (New) The method of claim 9 further comprising the first client checking to determine whether the server is at least able to respond to the availability request with an unavailability message if no confirmation message is received by the first client.

20. (New) The method of claim 9 further comprising the first client transmitting a negative server availability message to the predefinable other clients if the server provided an unavailability message or if the server did not respond to the availability request within a predetermined amount of time after the availability request was sent to the server.

21. (New) The method of claim 9 further comprising the first client receiving keep alive data from the predefinable other clients.

22. (New) The method of claim 9 further comprising one of the predefinable other clients transmitting a collective availability request to the server if no multicast collective request has been received by that client within a predefined time period.

23. (New) The method of claim 9 further comprising the first client storing keep alive data received from the predefinable other clients.

24. (New) The client of claim 18 further comprising a fourth device configured to monitor for receipt of a message from one of the predefinable other clients regarding availability of the server.

25. (New) The client of claim 18 further comprising a fourth device configured to store keep alive data received from the predefinable other clients.

26. (New) The client of claim 18 wherein the message regarding the availability of the server is a negative multicast availability message if an availability message is not received from the server within a predetermined time period after the availability request is sent to the server.

27. (New) The client of claim 18 wherein the first device is also the third device and the first device is a transmitter or a transmission mechanism.

28. (New) The client of claim 18 wherein the first device, second device and third device are interconnected portions of the client.

29. (New) The client of claim 18 further comprising a fourth device configured to monitor for reception of a message from a prescribable further client about server availability and also configured to prevent transmission of an availability request to the server at least for a prescribable time interval after receipt of such a message.